## Industrial Hygiene

DUNS NO.: 00-617-3082

## MATERIAL SAFETY **DATA SHEET**

Form 15593-C PWO

3M 3M Center AUG 18 1989

St. Paul, Minnesota 55144 (612) 733-1110

Trade Name Chemical Family FC-134 FLUORAD Brand Fluorochemical Surfactant Cationic Fluorochemical Surfactant 3M I. D. Number 98-0207-0404-9 (5 lb. unit) Commercial Chemicals Division 1. INGREDIENTS CAS.# TLV® (unit) %  $0.02 \text{ mg/m}^{3}$ \* 100 Perfluoroalkyl Quaternary Ammonium Iodides \*Recommended exposure limit, not a TLVR. 2. PHYSICAL DATA Solubility in Water **Boiling Point** Not Applicable Slight Specific Gravity (H2O=1) Vapor Pressure Bulk ∿0.8 Percent Volatile Vapor Density (Air = 1) 0 Evaporation Rate ( Not Applicable 3-5 Appearance and Odor Yellow powder, slight musty odor. 3. FIRE AND EXPLOSION HAZARD DATA Flammable Limits: LEL = UEL = Flash Point (Test Method) Non-Flammable Extinguishing Media Water, Foam, CO2, Dry Chemical Special Fire Fighting Procedures None Unusual Fire and Explosion Hazards Toxic by-products including HF and ammonia may be formed. 4. ENVIRONMENTAL INFORMATION Spill Response Collect spilled material. Use wet sweeping compound to reduce dusting. Recommended Disposal Bury in a chemical or hazardous waste landfill. Discharge waterborne wastes to a wastewater treatment system in accordance with local regulations. Reduce discharge rate if foaming occurs.

**Environmental Data** 

Biochemical Oxygen Demand (BOD), 15-Day - Nil Chemical Oxygen Demand (COD) - 0.16 g/g 96-Hr. LC<sub>50</sub>, Fathead Minnow (<u>Pimephales promelas</u>) - 30 mg/1

| 5. HEALTH HAZARD DATA   |   |   |                    |
|---|---|---|--------------------|
| Eye Contact FC-134 is mildly irritating to the eyes upon direct contact. Persons coming in direct contact would be expected to experience transient irritation but no permanent damage. |   |   |                    |
| Skin Contact FC-134 is minimally irracute dermal basis. FC  | ritating dermally. I<br>C-134 may be absorbed | t is considered practical through the skin. Avoid                             | ly non-toxic on an |
| Inhalation  |   |   |                    |
| Inhalation of FC-134 dust may cause irritation of the respiratory tract. Avoid breathing of the dust.   |   |   |                    |
| Ingestion   |   |   |                    |
| FC-134 is moderately toxic upon ingestion. The $LD_{50}$ (rat) is 500 mg/kg.  |   |   |                    |
| Suggested First Aid   |   |   |                    |
| SKIN CONTACT: Wash affe   |   |   |                    |
| 6. REACTIVITY DATA  |   |   |                    |
| STABILITY Unstable  Stable  | Conditions to Avoid                           |   |                    |
| INCOMPATABILITY   | Materials to Avoid                            |   |                    |
| HAZARDOUS POLYMERIZATION May Not Occur  | Conditions to Avoid                           |   |                    |
| Hazardous Decomposition Products  |   |   |                    |
| Thermal decomposition may produce toxic materials including HF.   |   |   |                    |
| 7. SPECIAL PROTECTION INFORMATION   |   |   |                    |
| Eye Protection Goggles  |   | Skin Protection Rubber gloves, clothing as necessary to prevent skin contact. |                    |
| Ventilation   |   |   |                    |
| Local exhaust ventilation should be used to control airborne dust.  Respiratory and Special Protection If dust is not well controlled, a toxic dust respirator (such as 3M)             |   |   |                    |
| 9900 or equivalent) or a supplied air respirator should be worn.  |   |   |                    |
| Other Protection  |   |   |                    |
| 8. PRECAUTIONARY INFORMATION  |   |   |                    |
| Avoid skin and eye conto keep powder free eating. Launder clo   | flowing. Do not take                          | ning dust. Prevent moist<br>e internally. Wash hands                          |                    |
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| 9. DEPARTMENT OF TRANSPORTATION   |   |   |                    |
| DOT Proper Shipping Name Not Applicable   |   | DOT Hazard Class Not A  | pplicable          |
|   |   |   | Dec., 1980 8/80    |

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any process is the responsibility of the user.